Amendments to the Abstract

Please amend the original abstract (page 96) as follows.

ABSTRACT OF THE DISCLOSURE

A detector ~~101~~ outputs a detection signal indicating amplitude variation of an input frequency-multiplexed signal. An amplitude controller ~~102~~ adjusts the amplitude of the frequency-multiplexed signal by referring to the detection signal. A modulator ~~108~~ modulates the amplitude-adjusted frequency-multiplexed signal to produce a predetermined modulated signal. A second multiplexer ~~103~~ multiplexes the modulated signal and the detection signal to produce a multiplexed signal. An optical transmitter ~~104~~ converts the multiplexed signal into an optical signal, and then sends it out to an optical transmission path ~~and the like~~. An optical receiver ~~105~~ converts the received optical signal ~~received through the optical transmission path~~ into an electrical signal. A separator ~~106~~ separates the modulated ~~signal~~ and ~~the~~ detection ~~signal~~ signals from the electrical signal. A demodulator ~~109~~ demodulates the modulated signal to output the frequency-multiplexed signal. An amplitude adjuster ~~107~~ adjusts the amplitude of the frequency-multiplexed signal by referring to the detection signal to reproduce the original amplitude variation. ~~With such structure, the present optical transmission system can prevent quality deterioration in a transmission signal due to instantaneous amplitude variations of the frequency multiplexed signal and carry out optical transmission with less distortion.~~